



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,955	04/19/2005	Thomas Bernhard Pabst	003D.0041.U1(US)	8988
29683	7590	12/14/2005	EXAMINER	
HARRINGTON & SMITH, LLP			MAYO III, WILLIAM H	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	
			2831	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/531,955

Applicant(s)

PABST, THOMAS BERNHARD

Examiner

William H. Mayo III

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date April 19, 2005
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in PCT Application No. PCT/EP2003/011739, filed on October 23, 2003.

Information Disclosure Statement

2. The information disclosure statement filed April 19, 2005 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

The applicant is required to submit a new oath that is executed properly.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakaguchi et al (Pat Num 6,265,664, herein referred to as Sakaguchi). Sakaguchi discloses a method of forming an electrical connection of an electrical conductor (Figs 1-8C) to a contact element to achieve reliable joining of the shielded terminal (Col 1, lines 35-42). Specifically, with respect to claim 1, Sakaguchi discloses a method comprising the steps of introducing an electrical conductor (11) sheathed with an insulation (12) between two legs (left and right 21a, Fig 1c) of the contact element (20), applying a welding device (30 & 31, Figs 2a-2b) to both legs (left and right 21a), whereby heat is introduced during the welding process by switching on the welding current (Col 4, lines 7-18), whereby the heat introduced during the welding process breaks down the insulation (12) of the electrical conductor (11) and leads to a solid mechanical and electrical connection of the conductor (11) and the contact element (20, Col 4, lines 23-31). With respect to claim 2, Sakaguchi discloses a method wherein the welding process is resistance welding (Col 4, line 23). With respect to claim 3, Sakaguchi discloses a method wherein at the beginning of the welding process, current flows over two legs (left and right 21a) of the contact element (20) and its connection point (Col 4, lines 7-18). With respect to claim 4, Sakaguchi discloses a method

wherein the welding device (30 & 31) is applied to the outer sides of the two legs (left and right 21a) lying opposite the conductor (11, Figs 2b & 3a-3c). With respect to claim 5, Sakaguchi discloses method wherein the welding stamp (30 & 31) of the welding device is applied to each case the outer side of the contact element (20, Fig 2b). With respect to claim 6, Sakaguchi discloses a method wherein the contact element (20) is connected to a plug connector (20). With respect to claim 9, Sakaguchi discloses that the contact element (20) comprises contact legs (left and right 21a) that are bent to form a C-shape (Fig 2c). With respect to claim 10, Sakaguchi discloses a plug connector (Fig 1c) that the contact element (20) and the electrical conductor (11) connected to the contact element (20) was produced by the method as disclosed in claim 1 (see above).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi (Pat Num 6,265,664) in view of Goto (Pat Num 6,444,910). Sakaguchi discloses a method of forming an electrical connection of an electrical conductor (Figs 1-8C) to a contact element to achieve reliable joining of the shielded terminal (Col 1, lines 35-42) as disclosed above with respect to claim 1.

However, Sakaguchi doesn't necessarily disclose the conductor being a flat flex conductor (claim 7), nor the contact element being bent in a S-shape (claim 8).

Goto teaches a method of forming an electrical connection of an electrical conductor (Figs 1-13e) to a contact element to achieve a secured protected and insulated connection as a reduced cost (Col 1, lines 60-65). Specifically, with respect to claim 7, Goto teaches a method comprising introducing a electrical conductor (10) comprising flat flex conductors (13) for connecting to a contact element (11, i.e. bus bars), by welding (Col 5, lines 50-53). With respect to claim 8, Goto teaches that contact elements (11, Fig 4a) may be bent to form a S-shape (Fig 4a).

With respect to claims 7-8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the electrical connection of Sakaguchi to comprise the conductor being a flat conductor attached to a S-shaped contact element as taught by Goto because Goto teaches that such a configuration provides an electrical connection that achieves a secured protected and insulated connection as a reduced cost (Col 1, lines 60-65) and since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835..

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Maegawa (Pat Num 6,376,773), Warner et al (Pat Num 5,660,742), Sato (Pat Num 5,246,384), Hara (Pat Num 5,250,127), and Murakami et al (Pat Num 6,858,804), all of which disclose cable connections.

Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

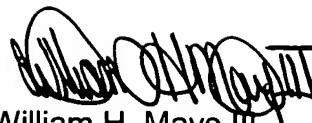
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/531,955

Page 7

Art Unit: 2831

A handwritten signature in black ink, appearing to read 'William H. Mayo III', written over a circular stamp.

William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
December 07, 2005